

AMENDMENTS TO THE CLAIMS

This listing of claims replaces all prior versions, and listings, of claims in the application:

1 1. (Previously Presented) A gas injection apparatus, comprising:
2 a tubular member defining an axial bore therethrough, the axial bore adapted to deliver a
3 gas into a wellbore proximate a perforation interval via orifices; and
4 a plurality of gas lift valves attached to the tubular member, the gas lift valves adapted to
5 regulate communication, via the corresponding orifices, from the axial bore of the tubular
6 member to the wellbore at or below the perforation interval.

1 2. (Previously Presented) The gas injection apparatus of claim 1, further comprising
2 a sealing mechanism to seal the wellbore above the perforation interval,
3 wherein the tubular member is adapted to engage the sealing mechanism.

1 3. (Previously Presented) The gas injection apparatus of claim 2, wherein the
2 sealing mechanism is a dual-port packer.

1 4. (Original) The gas injection apparatus of claim 1, wherein the tubular member is
2 adapted to inject a gas proximate the perforation interval of a gas-bearing well.

1 5. (Original) The gas injection apparatus of claim 1, wherein the tubular member is
2 adapted to inject a gas proximate the perforation interval of an oil-bearing well.

1 6. (Original) The gas injection apparatus of claim 1, further comprising a retrieving
2 element attached to the tubular member.

1 7. (Previously Presented) A gas lift system for use in producing a well having a
2 perforation interval, the system comprising:

3 a sealing mechanism adapted to seal the well at a location above the perforation interval.
4 the sealing mechanism having two ports therein;

5 a tubular string adapted to produce fluid from the perforation interval via one port in the
6 sealing mechanism; and

7 an injection tool adapted to inject gas into the well at or below the perforation interval via
8 the other port in the sealing mechanism, the injection tool having plural gas lift valves for
9 delivering the injected gas into the well at a location below the sealing mechanism and at or
10 below the perforation interval.

1 8. (Original) The gas lift system of claim 7, wherein the tubular string comprises
2 one or more gas lift valves for injecting a gas into the well at a location above the sealing
3 mechanism.

1 9. (Original) The gas lift system of claim 7, wherein the sealing mechanism is a
2 dual-port packer.

1 10. (Original) The gas lift system of claim 7, wherein the well is a gas-bearing well.

1 11. (Original) The gas lift system of claim 7, wherein the well is an oil-bearing well.

1 12. (Cancelled)

1 13. (Previously Presented) A method for unloading an accumulated liquid from a
2 well having a perforation interval proximate a gas-bearing formation, wherein hydrostatic
3 pressure of the accumulated liquid exceeds pressure of produced gas, the method comprising:
4 sealing the formation in the well at a location above the perforation interval;
5 providing a tubing string for establishing communication between surface and a point
6 below the sealing location;
7 providing a gas injection tool having a plurality of gas lift valves for establishing
8 communication between a point above the sealing location and the perforation interval below the
9 sealing location;
10 delivering gas into the well at or below the perforation interval via the plurality of gas lift
11 valves of the gas injection tool to decrease the hydrostatic pressure of the accumulated liquid to a
12 level sufficient to permit gas to be produced from the formation; and
13 removing the accumulated liquid and gas from the well via the tubing string.

1 14. (Previously Presented) A gas lift system for use in producing a wellbore having
2 perforations proximate a gas-bearing formation, the system comprising:
3 a dual-port packer adapted to seal the wellbore at a location above the perforations, the
4 sealing mechanism having two ports therein;
5 a tubing string adapted to deliver gas from the perforations proximate the formation via
6 one port in the packer to a surface location, wherein the tubing string has a valve that is actuated
7 in response to gas pressure in a well annulus outside the tubing string exceeding a predetermined
8 level; and
9 an injection tool adapted to inject gas from a surface location into the wellbore at or
10 below the perforations via the other port in the packer, the injection tool having a plurality of gas
11 lift valves for delivering the injected gas into the wellbore at a location below the packer.

1 15. (Previously Presented) The gas injection apparatus of claim 1, wherein the gas
2 lift valves are arranged on a side of the tubular member to enable injected gas to pass in a radial
3 direction of the tubular member into the wellbore through the corresponding orifices.

1 16. (Previously Presented) The gas injection apparatus of claim 1, wherein a first of
2 the gas lift valves is actuated in response to the gas reaching a first gas pressure, and a second of
3 the gas lift valves is actuated in response to the gas reaching a second, different gas pressure.

1 17. (Cancelled)

1 18. (Previously Presented) The gas injection apparatus of claim 16, wherein the first
2 gas lift valve is closed once the delivered gas reaches the second pressure.

1 19. (Previously Presented) The gas lift system of claim 7, wherein a first of the plural
2 gas lift valves is actuatable in response to the gas reaching a first gas pressure, and a second of
3 the plural gas lift valves is actuatable in response to the gas reaching a second, different gas
4 pressure.

1 20. (Previously Presented) The gas lift system of claim 19, wherein the plural gas lift
2 valves are configured to sequentially actuate in response to the injected gas reaching different
3 pressures.

1 21. (Cancelled)

1 22. (Currently Amended) The method of claim 12, further comprising: A method for
2 producing through a wellbore having a perforation interval proximate a formation, comprising:
3 injecting gas into the wellbore at or below the perforation interval,
4 wherein injecting the gas comprises injecting the gas using an injecting tool having plural
5 gas lift valves;

6 actuating a first one of the gas lift valves when the injected gas reaches a first pressure;
7 and

8 actuating a second one of the gas lift valves when the injected gas reaches a second,
9 greater pressure.

1 23. (Previously Presented) The method of claim 22, further comprising closing the
2 first gas lift valve when the injected gas reaches the second pressure.

1 24. (Previously Presented) The gas injection apparatus of claim 1, wherein the
2 plurality of gas lift valves are located at or below the perforation interval.